# EE 491 Weekly Report (DEC15-19)

## Week 9

**Project Title:** Efficient Measurement of Soil Microtopography to Aid the Verification of European Space Agency and NASA Satellite Observations of Soil Moisture

Advisor: Brian Hornbuckle Client: Brian Hornbuckle, ISU Agronomy and ECpE

**Members (roles):** Brant Walsh (Key concept Holder), Dillon McDowell (Team Webmaster), Yan Yao Chan (Team Leader, Team communication leader)

## Weekly Summary

The hardware is delivered and picked up after the class session. A preliminary setup is executed to test the hardware functionality and to ensure that the specifications meet the requirement.

## **Meeting notes:**

3/24 Group Meeting

Duration: 1 hour 50 minutes

Members Present: All

**Purpose and Goals:** To review the hardware delivery process and to discuss more about our design.

Achievements: The group completed the worksheet on project progress and discussed about the presentation with the course instructor in class. The group also picked up the delivered hardware from the Electrical Engineering building.

3/26 Group Meeting

Duration: 1 hour

Members Present: All

Purpose and Goals: To setup the hardware to test the functionality.

Achievements: The Raspbian OS and the hardware were proven to be functional and fit the group's demand. The group also discussed more about possible modification and essential coding that might be essential to complete the design project.

#### **Pending issues**

The hardware has not been tested and modified to meet the project's needs.

#### **Plans for next week**

To reconfigure the hardware if necessary to meet the project requirements such that the hardware is able to capture data and produce the desired tabulation.

#### **Individual Contributions for this week**

Brant Walsh (11 hours 20 minutes) – Attended the weekly class session and group meeting. Configured the hardware and OS installation on the Raspberry Pi.

Dillon McDowell (2 hour 50 minutes) – Attended the weekly class session and group meeting.

Yan Yao Chan (3 hour 20 minutes) – Attended the weekly class session and group meeting. Completed the weekly report.

### **Total contributions for the project**

Brant Walsh (30 hours 10 minutes) Dillon McDowell (21 hours 50 minutes) Yan Yao Chan (21 hours 30 minutes)